BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Missouri Flat – Gold Hill 115 kV Power Line Reconductoring Project Pursuant to General Order 131-D

Application No.

(U 39 E)

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE MISSOURI FLAT – GOLD HILL 115 kV POWER LINE RECONDUCTORING PROJECT

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Dated: August 13, 2013

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Pursuant to Section IX(B) of General Order ("GO") 131-D and Rules 2.1 through 2.5 and 3.1 of the California Public Utilities Commission's ("Commission" or "CPUC") Rules of Practice and Procedure, PACIFIC GAS AND ELECTRIC COMPANY ("PG&E") respectfully requests a Permit to Construct ("PTC") for the Missouri Flat – Gold Hill 115 kilovolt ("kV") Power Line Reconductoring Project ("project") to improve transmission reliability, increase capacity, and continue to provide safe and reliable electric service to customers in El Dorado County. The increased demand for electricity in this area has put the power line system at risk of overloading in the event of an outage, and this project will provide sufficient capacity to address that issue.

I. PROJECT OVERVIEW

PG&E is proposing to reinforce the electric system in El Dorado County by replacing existing wires (reconductoring), replacing existing poles, and modifying existing lattice steel towers along approximately 12.5 miles of the existing double-circuit Missouri Flat-Gold Hill 115 kV Power Line ("Missouri Flat-Gold Hill Line"), which extends in a generally east-west direction from Shingle Springs Substation in the community of Shingle Springs, to Clarksville Substation in the community of El Dorado Hills, to Gold Hill Substation in the City of Folsom. In addition, to

facilitate construction, approximately 0.3 miles of the line east of Shingle Springs Substation will be reconductored. The line generally parallels U.S. Highway 50 for approximately 6.4 miles, crossing it at five locations, and bisects a U.S. Bureau of Land Management ("BLM") parcel—Pine Hill Preserve—located northwest of Shingle Springs Substation, for approximately 0.4 miles. (See Project Map, attached as Exhibit A, and Figure 2-1 of the Proponent's Environmental Assessment ("PEA"), attached as Exhibit B.) The new, higher-capacity wires will allow Gold Hill, Clarksville and Shingle Springs substations to provide uninterrupted electrical service to area customers even if there are multiple 115 kV line outages because each line will have sufficient capacity to handle the entire load if the other line or lines fail. As the California Independent System Operator ("CAISO") recognized when it approved the project in 2008, the project will meet customer demand and improve service reliability. (See excerpts of the 2008 CAISO Transmission Plan (2008-2017), attached as Exhibit F, at 59.)

PG&E will also reconductor and convert approximately seven miles of a nearby 60 kV line—Gold Hill No. 1 60 kV Power Line ("Gold Hill No. 1 Line")—to 115 kV voltage from Clarksville Substation to just beyond Shingle Springs Substation to allow PG&E to transfer electric loads from the Missouri Flat-Gold Hill Line during construction. Once the project is completed, the Gold Hill No. 1 Line will be returned to 60 kV service, but the upgraded facilities will remain in place.

Minor modifications will be made to substation equipment and facilities at Shingle Springs, Pacific Western Pipe, Limestone, Clarksville, and Gold Hill substations, and Missouri Flat Switching Station to tie the new conductor into the substations and modify existing equipment to accommodate the line upgrades. In order to minimize environmental impacts, PG&E is proposing to reconductor in place within existing easements.

II. REGIONAL CONTEXT AND PROJECT COMPONENTS

'A. Regional Context

1. Existing Regional Electric System

PG&E currently owns and operates a 115 kV electric power system serving customers in El Dorado County, including the communities of El Dorado Hills, Cameron Park, Shingle Springs, Diamond Springs and the City of Placerville. The system is made up of three lines—the double-circuit Missouri Flat-Gold Hill and El Dorado-Missouri Flat lines and the single-circuit Gold Hill-Clarksville Line—that, with their extensions, feed six electric distribution substations (Clarksville, Shingle Springs, Diamond Springs, El Dorado, Placerville and Apple Hill substations) serving more than 76,000 customers in the area. The double-circuit Missouri Flat-Gold Hill Line, a portion of which is being reconductored as part of the project, travels in an east-west direction interconnecting Diamond Springs, Shingle Springs, Clarksville, and Gold Hill substations and Missouri Flat Switching Station.

A separate 60 kV system is also located in El Dorado County, serving customers in southwest El Dorado and adjacent Amador counties; it is made up of a single, 28-mile-long single-circuit power line—the Gold Hill No. 1 Line—linking Gold Hill Substation in El Dorado County with Martell Substation in Amador County. In El Dorado County, the 60 kV system serves Pacific Western Pipe Substation, a customer-owned substation, as well as a few customers in the community of Cameron Park from PG&E's Limestone Substation.

B. Project Components

The project includes the following major components:

1. Missouri Flat- Gold Hill Line Reconductoring

a. Structures (Poles and Towers)

Approximately 9.6 miles of the Missouri Flat-Gold Hill Line—from Shingle Springs Substation west to the intersection of Broadstone Parkway and Empire Ranch Road in

eastern Folsom—is supported by approximately 60 tubular steel poles ("TSPs"). The existing TSPs will be removed and replaced at an approximately one-to-one ratio, roughly in line, with new TSPs within approximately 20 feet of existing pole locations. Replacement TSPs for approximately 40 of the existing 60 TSPs will be approximately 3 to 20 feet taller to provide electric and magnetic field minimization near residences and schools, and meet the clearance requirements provided in CPUC General Order 95, Rules for Overhead Electric Line Construction. The remaining TSPs will be replaced with new TSPs of approximately the same height. As part of the TSP replacement, other equipment, including cell antennas that are collocated on the existing poles, will be transferred to the new TSPs.

An approximately 2.9-mile segment of the Missouri Flat-Gold Hill Power Line—from the intersection of Broadstone Parkway and Empire Ranch Road west to Gold Hill Substation—is supported by 17 double-circuit lattice steel towers. Approximately 13 of these towers will be modified, including minor structural reinforcements, cross-arm replacements, and one leg extension to raise a tower approximately seven feet.

b. Conductors

The existing 715 all aluminum ("AA") conductors on the Missouri Flat-Gold Hill

Line are 0.974 inches in diameter and capable of carrying 759 amperes ("amps") under

normal conditions and 881 amps under emergency conditions. To increase capacity, the

project will replace the existing conductors with 1.092-inch-diameter, non-specular type 795

aluminum conductor steel supported ("ACSS"), rated to handle 1,500 amps. The span

distances between structures vary from approximately 50 to 1,400 feet, with an average span

length of approximately 850 feet. To optimize operations and maintenance activities,

insulators along the entire 12.5-mile-long line will be replaced during construction. In

addition, approximately 1,000 feet of existing 21 kV overhead distribution line will be placed

underground along Platt Circle, between Arches Avenue and Finders Way in the community of El Dorado Hills, so that the reconductored Missouri Flat-Gold Hill Line will meet ground-to-wire clearance requirements.

2. Gold Hill No. 1 Line Reconductoring

a. Structures (Poles and Towers)

The Gold Hill No. 1 Line segment to be reconductored is approximately seven miles long. This line is supported by 120 wood poles that range in height from 45 to 95 feet. Of the existing poles, approximately 40 will require minor modifications (e.g., reframing, installing new clamps), approximately 80 poles will be replaced, and approximately seven new interset poles will be installed. Three distribution wood pole structures, which include one wood H-frame structure and two wood poles, will be replaced with two new wood poles.

Of the existing 120 poles along the Gold Hill No. 1 Line, approximately 80 poles will be replaced at an approximately one-to-one ratio with new wood or light-duty steel ("LDS") poles and approximately one TSP (tubular steel, with foundation). Replacement wood or LDS poles, which will be located within approximately 20 feet of existing pole locations, will range in height from approximately 55 to 90 feet, and will be up to approximately 25 feet taller than existing wood poles. Replacement wood or LDS poles will be directly buried (without a foundation), placed roughly in line with the existing alignment.

To meet adequate ground-to-conductor clearance requirements, approximately seven interset poles will be added along the Gold Hill No. 1 Line, roughly parallel with Ridge Pass Drive between Rodeo Road and Strolling Hills Road in the community of Cameron Park.

The new poles, which will be direct buried, will be approximately 75 feet tall.

North of the intersection of Strolling Hills Road and Ridge Pass Drive in Cameron Park, approximately 150 feet of the Limestone Substation distribution feeder line may be relocated by replacing three existing distribution wood pole structures, including one wood

H-frame structure and two wood poles, with two new wood poles within approximately 80 feet of the existing structures.

b. Conductors

The existing 60 kV conductor on the Gold Hill No. 1 Line is 397 AA (0.724-inch diameter), with the capacity of carrying up to 711 amps, and 2/0 copper (0.416-inch diameter) conductor, with the capacity of carrying up to 443 amps. To increase capacity and voltage, the line will be reconductored with new 715 AA conductor that is 0.974 inches in diameter and is rated to handle a maximum of 1,039 amps. The span distances between structures vary from approximately 40 to 550 feet, with an average span length of approximately 250 feet. To optimize operations and maintenance activities, insulators along the entire 7-mile-long line will be replaced during construction.

3. Access Road Improvements

Construction vehicles are anticipated to reach work areas on existing access roads that are currently used for operations and maintenance. The majority of the project alignment crosses through developed areas, and tower and pole work areas are expected to be reached from existing roads that are either paved, gravel, or dirt. Access in several locations will be by unpaved (dirt or gravel) roads. Portions of some of these unpaved access roads may need to be reestablished and maintained through tree trimming, vegetation clearing, the addition of substrate, and some minor grading/blading. Along access routes within the Pine Hill Preserve and parcels immediately adjacent to the preserve, existing gates may be repaired or replaced and new gates may be installed as needed in coordination with BLM and relevant landowners.

Access to one pole located north of the intersection of Finders Way and Saratoga Way in El Dorado Hills will require establishing a new, approximately 100-foot-long spur road, which will be graded and graveled. Overland access from existing access roads or along the existing easement in relatively flat, grassy areas is anticipated to reach various work sites.

These overland routes are not expected to require grading or filling, although vegetation mowing or clearing may be required.

4. Substation Modifications

Minor modifications will be made to substation and switching station equipment and facilities at Shingle Springs, Pacific Western Pipe, Limestone, Clarksville, and Gold Hill substations and Missouri Flat Switching Station to tie the upgraded lines into the existing system and accommodate construction activities. No changes to existing operation and maintenance activities are anticipated with project implementation. Construction activities will include (1) replacing circuit breakers, switches, conductor, busses, jumpers, and line relays, (2) installing junction boxes and pull boxes for new equipment, and (3) upgrading existing supervisory control and data acquisition systems. All work at the substations and the switching station will be completed within existing fence lines, and no facility expansions are proposed.

III. THE APPLICANT

Since October 10, 1905, PG&E has been an operating public utility corporation, organized under the laws of the State of California. PG&E is engaged principally in the business of furnishing gas and electric service in California. PG&E's principal place of business is 77 Beale Street, San Francisco, California 94105.

Communications with regard to this Application should be addressed to:

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Incorporated herein by reference is a certified copy of PG&E's Articles of Incorporation, effective April 12, 2004, which was filed with the Commission in connection with PG&E's Application No. A.04-05-005 on May 3, 2004.

A copy of PG&E's most recent proxy statement was filed with the Commission on April 18, 2013 with Application 13-04-012, and is incorporated herein by reference. Copies of PG&E's most recent financial statements (contained in the Form 10-Q Quarterly Report filed on July 31, 2013, by PG&E Corporation and the Pacific Gas and Electric Company, for the period ending June 30, 2013) are attached hereto as Exhibit E.

IV. ADDITIONAL INFORMATION REQUIRED BY SECTION IX(B) OF GO 131-D:

Pursuant to Rule 2.4 (b) of the Commission's Rules of Practice and Procedure, PG&E has submitted a PEA, which is attached as Exhibit B to this Application. The following information is required by Section IX.B of GO 131-D:

a. A description of the proposed power line and substation facilities, including the proposed power line route; proposed power line equipment, such as tower design and appearance, heights, conductor sizes, voltages, capacities, substations, switchyards, etc., and a proposed schedule for authorization, construction, and commencement of operation of the facilities.

A detailed description of the proposed project, route, and components is contained in Section II.B above and in Chapter 2 of the PEA, <u>Exhibit B</u>. A Preliminary Project Schedule is attached as <u>Exhibit C</u>.

b. A map of the proposed power line routing or substation location showing populated areas, parks, recreational areas, scenic areas, and existing electrical transmission or power lines within 300 feet of the proposed route or substation.

A project map showing the project route and existing power lines within 300 feet of the project is attached as <u>Exhibit A</u>. Maps of the populated areas, parks, recreational areas and scenic areas near the project alignment as well as land use maps are provided in Chapter 3 of the PEA, <u>Exhibit B</u> (see Figures 3.1-1, 3.10-1, and 3.14-1).

c. Reasons for adoption of the power line route or substation location selected, including comparison with alternative routes or locations, including the advantages and disadvantages of each.

As discussed in Chapter 2 of the PEA, <u>Exhibit B</u>, this project consists of reconductoring an existing power line, so the discussion of routing issues required in GO 131-D, Section IX.B.1.c, is not applicable to this application.

d. A listing of the governmental agencies with which proposed power line route or substation location reviews have been undertaken, including a written agency response to applicant's written request for a brief position statement by that agency. (Such listing shall include The Native American Heritage Commission, which shall constitute notice on California Indian Reservation Tribal governments.) In the absence of a written agency position statement, the utility may submit a statement of its understanding of the position of such agencies.

United States Bureau of Land Management ("BLM")

An approximately 0.4-mile-long portion of the project traverses Pine Hill Preserve ("Preserve"), which is managed by BLM. In 2012, PG&E notified BLM about the project when it requested permission to access the Preserve to conduct special-status plant and cultural resource surveys for the project; BLM provided plant data for the project. In February 2013, PG&E provided BLM a draft project description and map, and BLM determined that, because PG&E has a pre-existing easement on the lands that later became a part of the Preserve, the project would not require a right-of-way ("ROW") grant authorization, but rather a Special Use Permit ("SUP"). Also in February 2013, BLM's National Environmental Policy Act ("NEPA") coordinators determined that the SUP would not require the preparation of a NEPA document, but would require consultation with the U.S. Fish and Wildlife Service ("USFWS") under Section 7 of the Endangered Species Act ("ESA"). BLM's cultural staff was notified of the project on March 11, 2013.

On March 28, 2013, BLM and PG&E discussed the project and impacts to special-status plants in a multi-agency meeting that also included USFWS and the California Department of Fish and Wildlife ("CDFW"). Prior to this meeting, PG&E provided a draft

project description and map. At this meeting, BLM provided information on special-status plant life history and threats, and advice on minimizing impacts to plants during construction of the project. The Applicant Proposed Measures ("APMs") in the project's PEA were developed to address these concerns and suggestions.

On July 8, 2013, BLM, PG&E and the other agencies participated in another multi-agency meeting to discuss the estimated number of plants impacted by the project and determine permitting next-steps. Prior to this meeting, PG&E provided a map, a table documenting potential impacts to plants, and draft APMs. At this meeting, BLM provided information on special-status plant propagation and comments to the draft APMs, which were incorporated and addressed in the final draft of the PEA. At the July 8, 2013 meeting, BLM stated that it would review parcel maps in the vicinity of the Preserve to help identify potential mitigation parcels. PG&E indicated it would prepare a SUP application for BLM, and prepare documents to facilitate biological and cultural resource-related consultations.

United States Fish and Wildlife Service ("USFWS")

In February 2013, USFWS confirmed with BLM that PG&E's SUP application would create a nexus for USFWS to consult on the project under Section 7 of the ESA, and determined that the USFWS consultation would cover the entire project area, not just the BLM property. On March 28, 2013, USFWS and PG&E discussed the project and impacts to special-status plants in the multi-agency meeting with BLM and CDFW. At this meeting, USFWS provided information on the process for issuing a Biological Opinion ("BO") for the project and contributed to a discussion of mitigation options for impacts to special-status plants.

On July 8, 2013, USFWS and PG&E participated in another multi-agency meeting to discuss the estimated number of plants impacted by the project and determine permitting

next-steps. At this meeting, the USFWS again provided information on the process for issuing a BO. PG&E indicated it will prepare a Biological Assessment for BLM that can be used by the USFWS as the basis of its BO.

California Department of Fish and Wildlife ("CDFW")

On March 28, 2013, CDFW participated in the multi-agency meeting with PG&E, BLM and USFWS to discuss the project and impacts to special-status plants. At this meeting, CDFW advised PG&E of its concerns and suggestions for minimizing impacts to plants during construction of the project, contributed to a discussion of mitigation options for impacts to plants, and provided an estimate of the process for acquiring an Incidental Take Permit ("ITP") for the project to comply with the California Endangered Species Act ("CESA").

On July 8, 2013, CDFW and PG&E participated in another multi-agency meeting to discuss the estimated number of plants impacted by the project and determine permitting next-steps. At this meeting, CDFW provided comments to the draft APMs, clarified CDFW's requirements for impact analyses and mitigation for the PEA, and described the process for acquiring an ITP for permanent impacts to a State-listed plant. The CDFW comments and requirements were incorporated in the final PEA. At the July 8, 2013 meeting, CDFW stated that it would review parcel maps with BLM to help identify potential mitigation parcels. PG&E indicated that an ITP application would be submitted to CDFW near the end of California Environmental Quality Act ("CEQA") process.

Native American Heritage Commission ("NAHC")

In a letter dated March 20, 2009, PG&E's consultant contacted the NAHC to request a search of the Sacred Lands File and a list of Native American contacts with whom they may consult regarding the project. On March 30, 2009, the NAHC responded that the Sacred

Lands File failed to indicate the presence of sacred sites in the project area. The NAHC provided a list of individuals and organizations to be contacted regarding information on Native American cultural resources in the project area. PG&E's consultant sent letters to these individuals and tribes in March and September 2009, soliciting concerns about the project. No responses were received.

On August 9, 2011, at the request of PG&E's Senior Cultural Resources Specialist, NAHC provided an updated list of Native American contacts. On February 6, 2012, PG&E sent letters to all the Native American contacts identified by the NAHC in 2009 and 2011. A follow up e-mail or fax was sent April 12, 2012 to those contacts who had not yet responded. To date, PG&E has received responses from 3 of the 14 individuals contacted. Each response requested copies of the reports, when available, along with project updates and notification if resources are found within the project area.

El Dorado County

On June 5, 2013, PG&E met with El Dorado County staff to provide them with an overview of the project. County staff expressed support for the project and stated that they would provide a position statement.

Sacramento County

On May 31, 2013, PG&E provided Sacramento County staff with an overview of the project. County staff expressed support for the project and provided a letter of support on June 23, 2013, expressing appreciation for being included in this process.

City of Folsom

On May 31, 2013, PG&E spoke with the City of Folsom staff and provided them with an overview of the project. City staff expressed support for the project and provided a letter of support on June 4, 2013.

El Dorado Hills Community Services District

On June 10, 2013, PG&E met with El Dorado Hills Community Services District staff and provided them with an overview of the project. District staff expressed support for the project and provided a letter of support on July 9, 2013.

Cameron Park Community Services District

On June 12, 2013, PG&E met with Cameron Park Community Services District staff and provided them with an overview of the project. District staff members expressed support for the project and suggested ways to minimize potential impacts to parks and programs. A letter memorializing their comments was received on July 24, 2013.

Buckeye Union School District

On June 20, 2013, PG&E spoke with Buckeye Union School District staff to provide an overview of the project. District staff expressed support for the project and provided a comment letter on June 25, 2013, requesting that work at William Brooks Elementary be performed outside of school hours.

V. MEASURES TAKEN TO REDUCE EMF EXPOSURE

Section X(A) of GO 131-D requires that applications for a PTC include a description of the measures taken or proposed by the utility to reduce the potential exposure to electric and magnetic fields ("EMF") generated by the proposed facilities. In accordance with Section X(A) of GO 131-D, CPUC Decision No. D.06-01-042 ("EMF Decision"), and PG&E's EMF Design Guidelines prepared in accordance with the EMF Decision, PG&E is required to prepare a Field Management Plan ("FMP") that identifies the "no-cost" and "low-cost" magnetic field reduction measures that will be installed as part of the final engineering design for the project. Accordingly, the FMP for this project proposes the following measures to reduce the magnetic field strength levels from electric power facilities:

- Increase the height of 13 poles and 13 towers in the school and residential land use areas by 10 feet to reduce magnetic field strength at ground level; and
- On the Missouri Flat-Gold Hill Line, install conductors with optimal phasing to reduce the magnetic field at the edge of the right of way.

A copy of the Field Management Plan for this project is attached as Exhibit D.

VI. PUBLIC NOTICE

Pursuant to Section XI(A) of GO 131-D, notice of the Application will be sent to El Dorado County Planning and Development Services Department, the City of Folsom Community Development and Planning Services, the California Energy Commission, the State Department of Transportation and its Division of Aeronautics, the Secretary of the Resources Agency, the CDFW, the Department of Public Health, the California Water Resources Control Board, the California Air Resources Board, the El Dorado County Air Quality Management District, the Sacramento Metropolitan Air Quality Management District, the Central Valley Regional Water Quality Control Board, the NAHC, the State Department of Transportation's District Office, the USFWS, the BLM, all owners of land within 300 feet of the proposed project (as determined by the most recent local assessor's parcel roll available to PG&E at the time the notice is sent), and any other interested parties that have requested such notification.

In accordance with Section XI(A)(2), within ten days after filing the Application,
PG&E will publish a notice of the Application once a week for two successive weeks in the
Sacramento Bee and the Mountain Democrat newspapers. In accordance with Section
XI(A)(3), PG&E will also post a notice of the Application on-site and off-site where the
proposed project is located. PG&E will deliver a copy of the notice to the CPUC Public

Advisor and the CPUC's Energy Division in accordance with Section XI(A)(3), and will file a declaration of mailing and posting with the Commission within five days after completion.

VII. REQUEST FOR TIMELY ACTION

As described in Exhibit C, PG&E's Preliminary Project Schedule, the Project must be complete and operational by summer of 2017 in order to ensure the ability of the system to safely and reliably serve the El Dorado County area without interruptions or emergency conditions. To enable PG&E to meet these operations requirements, secure any necessary secondary permits and property rights, and begin construction by summer of 2015, PG&E respectfully requests that this Application be approved no later than August 1, 2014.

VIII. EXHIBITS

The following exhibits are attached and incorporated by reference to this Application:

Exhibit A: Project Map

Exhibit B: Proponent's Environmental Assessment ("PEA")

Exhibit C: Preliminary Project Schedule

Exhibit D: EMF Field Management Plan

Exhibit E: PG&E's Financial Statement from the latest Form 10-Q Quarterly Report

Exhibit F: Excerpts from the 2008 CAISO Transmission Plan (2008-2017)

IX. CONCLUSION

PG&E respectfully requests that the Commission:

- 1. Issue a Decision and Order, effective immediately, granting PG&E a Permit to Construct the Missouri Flat-Gold Hill 115 kV Power Line Reconductoring Project, adopting an appropriate environmental document for the project, and granting any other permission and authority necessary to construct, operate and maintain the project.
- 2. Authorize Energy Division to approve requests by PG&E for minor project modifications that may be necessary during final engineering and construction of the project so long as Energy Division finds that such minor project modifications would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
 - Grant such other and further relief as the CPUC finds just and reasonable.
 Dated in San Francisco, California, this 13th day of August, 2013.

Respectfully submitted,

JOHN W. BUSTERUD DAVID T. KRASKA Law Department Pacific Gas and Electric Company Post Office Box 7442 San Francisco, CA 94120

JO LYNN LAMBERT ATTORNEY AT LAW 707 Brookside Avenue Redlands, CA 92373

By:

LAMBERT

Attorneys for Applicant

PACIFIC GAS AND ELECTRIC COMPANY

SCOPING MEMO INFORMATION

Category:

Ratesetting. Pursuant to Rule 2.1(c) of the Commission's Rules of Practice and Procedure, the application must propose a category for the proceeding as defined in Rule 1.3. If none of the enumerated categories are applicable, proceedings will be categorized under the catch-all "ratesetting" category. (CPUC Rule 7.1 (e)(2).) The Commission has consistently found that applications for CPCNs and PTCs under GO 131-D do not fit within any of the enumerated categories and should therefore be considered as "ratesetting proceedings."

Need for hearing:

The CPUC has determined that issues related to project need and cost are not within the scope of PTC applications, leaving only environmental review as a relevant issue. No areas of environmental or other public concern are known. If concerns about the project are raised, PG&E recommends that a public participation hearing be held.

Issues:

None known.

Proposed Schedule:

See Exhibit C, attached.

VERIFICATION

I, the undersigned, declare:

I am an officer of PACIFIC GAS AND ELECTRIC COMPANY, a corporation, and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are stated on information or belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

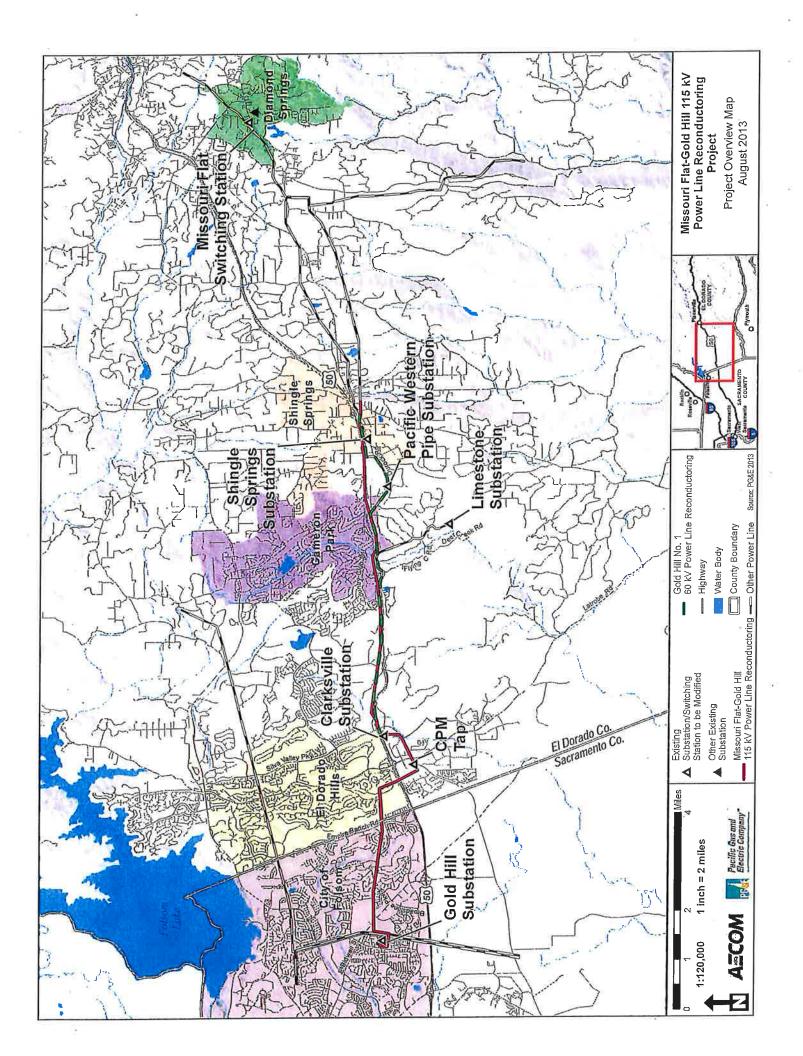
Executed on

, 2013, at San Francisco, California.

Janet C. Loduca

Vice President, Environmental

Exhibit A



BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Missouri Flat – Gold Hill 115 kV Power Line Reconductoring Project Pursuant to General Order 131-D

Application No.

(U 39 E)

EXHIBIT B

PROPONENT'S ENVIRONMENTAL ASSESSMENT

[Proponent's Environmental Assessment (PEA) was filed separately in paper form]

Exhibit C

Exhibit C

MISSOURI FLAT-GOLD HILL 115 KV POWER LINE RECONDUCTORING PROJECT PRELIMINARY PROJECT SCHEDULE

August 13, 2012			
September 13, 2013			
October 13, 2013 or sooner			
November 15, 2013			
February 15, 2014			
March 15, 2014			
May 15, 2014			
August 1, 2014			
August 2014 – August 2015			
August 2014 – August 2015			
August 2014 – August 2015			
Summer 2015			
May 2017			
May 2017			



I. General Description of Project

Project Lead: Project Manager, Electric Transmission Maintenance and Construction

Transmission Lines: Missouri Flat-Gold Hill 115 kV line #1

Missouri Flat-Gold Hill 115 kV line #2

Distribution line Underbuild: 21 kV.

Scope of Work:

The current scope of work is to reconductor Missouri Flat-Gold Hill 115 kV lines No. 1 and 2 (~25 miles long each) with 3M ACCR 636 T16 (Grosbeak) conductor. These 2 lines are on a Double Circuit Pole Line (DCPL) and Double Circuit Tower Line (DCTL) the scope starts from 2 spans northeast of Shingle Spring Substation (pole 22/174) to Shingle Spring Substation, then to Clarksville Substation and ends @ Gold hill Substation. The Gold Hill-Clarksville 115 kV line and the Gold Hill 60 kV No. 1 lines (also a DCTL) run parallel with the Missouri Flat-Gold Hill 115 kV No. 1 & 2 lines from Clarksville Substation to Gold Hill Substation.

II. BACKGROUND: CPUC DECISION 93-11-013 AND EMF POLICY

On January 15, 1991, the CPUC initiated an investigation to consider its role in mitigating the health effects, if any, of electric and magnetic fields from utility facilities and power lines. A working group of interested parties, called the California EMF Consensus Group, was created by the CPUC to advise it on this issue. It consisted of 17 stakeholders representing citizens groups, consumer groups, environmental groups, state agencies, unions, and utilities. The Consensus Group's fact-finding process was open to the public, and its report incorporated concerns expressed by the public. Its recommendations were filed with the Commission in March 1992.

In August 2004 the CPUC began a proceeding known as a "rulemaking" (R.04-08-020) to explore whether changes should be made to existing CPUC policies and rules concerning EMF from electric transmission lines and other utility facilities.

Through a series of hearings and conferences, the Commission evaluated the results of its existing EMF mitigation policies and addressed possible improvements in implementation of these policies. The CPUC also explored whether new policies are warranted in light of recent scientific findings on the possible health effects of EMF exposure.

The CPUC completed the EMF rulemaking in January 2006 and presented these conclusions in Decision D.06-01-042:

- The CPUC affirmed its existing policy of requiring no-cost and low-cost mitigation measures to reduce EMF levels from new utility transmission lines and substation projects.
- The CPUC adopted rules and policies to improve utility design guidelines for reducing EMF, and provides for a utility workshop to implement these policies and standardize design guidelines.
- Despite numerous studies, including one ordered by the Commission and conducted by the California Department of Health Services, the CPUC stated "we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences."
- The CPUC said it will "remain vigilant" regarding new scientific studies on EMF, and if these studies indicate negative EMF health impacts, the Commission will reconsider its EMF policies and open a new rulemaking if necessary.

In response to a situation of scientific uncertainty and public concern, the decision specifically requires PG&E to consider "no-cost" and "low-cost" measures, where feasible, to reduce exposure from new or upgraded utility facilities. It directs that no-cost mitigation measures be undertaken, and that low-cost options, when they meet certain guidelines for field reduction and cost, be adopted through the project certification process. PG&E was directed to develop, submit

and follow EMF guidelines to implement the CPUC decision. Four percent of total project budgeted cost is the benchmark in implementing EMF mitigation, and mitigation measures should achieve incremental magnetic field reductions of at least 15%.

HI. ELECTRIC AND MAGNETIC FIELDS (EMF)

EMF is a term used to describe electric and magnetic fields that are created by electric voltage (electric field) and electric current (magnetic field). Power frequency EMF is a natural consequence of electrical circuits, and can be either directly measured using the appropriate measuring instruments or calculated using appropriate information.

Electric fields are present whenever voltage exists on a wire, and are not dependent on current. The magnitude of the electric field is primarily a function of the configuration and operating voltage of the line and decreases with the distance from the source (line). The electric field can be shielded (i.e., the strength can be reduced) by any conducting surface, such as trees, fences, walls, buildings, and most types of structures. The strength of an electric field is measured in volts per meter (V/m) or kilovolts per meter (kV/m).

Magnetic fields are present whenever current flows in a conductor, and are not dependent on the voltage of the conductor. The strength of these fields also decreases with distance from the source. However, unlike electric fields, most common materials have little shielding effect on magnetic fields.

The magnetic field strength is a function of both the current on the conductor and the design of the system. Magnetic fields are measured in units called Gauss. However, for the low levels normally encountered near electric utility facilities, the field strength is expressed in a much smaller unit, the milliGauss (mG), which is one thousandth of a Gauss.

Power frequency EMF are present wherever electricity is used. This includes not only utility transmission lines, distribution lines, and substations, but also the building wiring in homes, offices, and schools, and in the appliances and machinery used in these locations. Magnetic field intensities from these sources can range from below 1 mG to above 1,000 mG (1 Gauss).

Magnetic field strengths diminish with distance. Fields from compact sources (i.e., those containing coils such as small appliances and transformers) drop off with distance "r" from the source by a factor of $1/r^3$. For three-phase power lines with balanced currents, the magnetic field strength drops off at a rate of $1/r^2$. Fields from unbalanced currents, which flow in paths such as neutral or ground conductors, fall off inversely proportional to the distance from the source, 1/r. Conductor spacing and configuration also affect the rate at which the magnetic field strength decreases, as well as the presence of other sources of electricity. The magnetic field levels of PG&E's power lines will vary with customer demand.

Magnetic field strengths for typical transmission power line loads at the edge of rights-of-way are approximately 10 to 90 mG.

IV. No-Cost and Low-Cost Magnetic Field Mitigation

Base Case Phasing:

From Shingle Spring Sub to Clarksville Sub to Gold Hill Sub -

Missouri Flat-Gold Hill 115 kV line #1 Phasing

Top-C, Mid-B, Bot-A

Missouri Flat-Gold Hill 115 kV line #2 Phasing

Top B, Mid-A, Bot-C

Optimally Phase Circuits:

The phases of the Missouri Flat-Gold Hill 115 kV line #2 will be arranged for minimum magnetic field level at the edge of the right of way. The phasing will be changed to the following:

From Shingle Spring Sub to Clarksville Sub to Gold Hill Sub -

Missouri Flat-Gold Hill 115 kV line #1 Phasing

Top-C, Mid-B, Bot-A

Missouri Flat-Gold Hill 115 kV line #2 Phasing

Top A, Mid-B, Bot-C

V. General Description of Surrounding Land Uses

Schools or Daycare: Two poles.

Residential (rural): Eleven poles & thirteen towers.

Commercial/Industrial: Twenty-four poles.

Recreational: None.

Agricultural, Rural, and Undeveloped Land: Twenty-two poles & four towers.

Priority Areas where Low Cost Measures are to be Applied

The thirteen poles and thirteen towers in the school and residential land use areas are considered for magnetic field reduction.

VI. Conclusion - Field Reduction Options Selected

This FMP proposes to raise the height of thirteen poles and thirteen towers in the school and residential land use areas by 10 feet taller than required for meeting General Order 95. No other low-cost mitigation is available for this project.

The phases of the Missouri Flat-Gold Hill 115 kV line #2 will be arranged for minimum magnetic field level at the edge of the right of way. The phasing will be changed to the following:

From Shingle Spring Sub to Clarksville Sub to Gold Hill Sub –

Missouri Flat-Gold Hill 115 kV line #1 Phasing Missouri Flat-Gold Hill 115 kV line #2 Phasing Top-C, Mid-B, Bot-A

Top A, Mid-B, Bot-C



PACIFIC GAS AND ELECTRIC COMPANY CONDENSED CONSOLIDATED STATEMENTS OF INCOME

	(Unaudited)							
		Three Mo	nths E	Inded		Six Mon	ths End	led
		Jur	ie 30,	193.		Jun	e 30,	
(in millions)	0	2013		2012		2013	,	2012
Operating Revenues				9:		E mercena	J.W	
Electric	\$	3,057	\$	2,930	\$	5,855	\$	5,701
Natural gas		718		662		1,591		1,531
Total operating revenues	, St	3,775		3,592		7,446		7,232
Operating Expenses					8		8 9	1.001
Cost of electricity		1,189	5	962		2,172		1,821
Cost of natural gas		179		132		525		475
Operating and maintenance		1,256		1,425		2,592		2,791
Depreciation, amortization, and decommissioning		516		. 606		1,019		1,190
Total operating expenses		3,140	2///	3,125		6,308	L.	6,277
Operating Income	wa sa	635		467		1,138		955
Interest income	3.	3	ý.	2	5	4	9 10	3
Interest expense	18	(171)		(171)		(341)	0202	(339)
Other income, net		22	.1	22	<u>. 18</u>	46		45
Income Before Income Taxes		489		320		847		664
Income tax provision		160		93	8	281	14.16	206
Net Income		329		227		566		458
Preferred stock dividend requirement	e. . E	4		4		7	ii.	7
Income Available for Common Stock	\$	325	\$	223	\$	559	\$	451

See accompanying Notes to the Condensed Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY CONDENSED CONSOLIDATED BALANCE SHEETS

Image: Im	i	(Un	audited)
(in millions) 2013 2012 ASSETS Current Assets S 61 \$ 194 Cash and cash equivalents \$ 61 \$ 194 Restricted cash 305 330 Accounts receivablet Total current Assets \$ 1,034 937 Customers (net of allowance for doubtful accounts of \$80 and \$87 \$ 1,034 937 Accrued unbilled revenue 766 761 Regulatory balancing accounts 1,205 936 Other 275 366 Regulatory assets 508 564 Inventories: 327 309 Gas stored underground and fuel oil 148 135 Materials and supplies 327 309 Income taxes receivable 361 186 Other 169 160 Total current assets 5,159 4,878 Property, Plant, and Equipment 41,227 39,701 Gas 13,162 12,571 Construction work in progress 2,03 1,894 T		Bal	lance At
ASSETS Current Assets S		June 30,	December 31,
ASSETS Current Assets 61 \$ 194 Cash and cash equivalents 305 330 Accounts receivable: Customers (net of allowance for doubtful accounts of \$80 and \$87 at respective dates) 1,034 937 Accrued unbilled revenue 766 761 Regulatory balancing accounts 1,205 936 Other 275 366 Regulatory assets 508 564 Inventories: 327 309 Gas stored underground and fuel oil 148 135 Materials and supplies 327 309 Income taxes receivable 361 186 Other 169 160 Total current assets 5,159 4,878 Property, Plant, and Equipment 41,227 39,701 Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643)	(in millions)	2013	2012
Cash and cash equivalents \$ 61 \$ 194 Restricted cash 305 330 Accounts receivable: Customers (net of allowance for doubtful accounts of \$80 and \$87 at respective dates) 1,034 937 Accrued unbilled revenue 766 761 Regulatory balancing accounts 1,205 936 Other 275 366 Regulatory assets 508 564 Inventories: 327 309 Gas stored underground and fuel oil 148 135 Materials and supplies 327 309 Income taxes receivable 361 186 Other 169 160 Total current assets 5,159 4,878 Property, Plant, and Equipment 41,227 39,701 Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation 17,352 (16,643) Net property, plant, and equipment 39,067	primaries accepted toward for the state of t		
Restricted cash 305 330 Accounts receivable: Customers (net of allowance for doubtful accounts of \$80 and \$87 at respective dates) 1,034 937 Accrued unbilled revenue 766 761 Regulatory balancing accounts 1,205 936 Other 275 366 Regulatory assets 508 564 Inventories: Supplies 327 309 Gas stored underground and fuel oil 148 135 327 309 Income taxes receivable 361 186 186 60 160 169 160	Current Assets		AMAI GRAMA E
Accounts receivable: Customers (net of allowance for doubtful accounts of \$80 and \$87 at respective dates)	Cash and cash equivalents	\$ 61	
Customers (net of allowance for doubtful accounts of \$80 and \$87 at respective dates) 1,034 937 Accrued unbilled revenue 766 761 766 Regulatory balancing accounts 1,205 936 736 736 736 736 736 736 736 736 736 7	Restricted cash	305	330
at respective dates) 1,034 937 Accrued unbilled revenue 766 761 Regulatory balancing accounts 1,205 936 Other 275 366 Regulatory assets 508 564 Inventories: 308 564 Gas stored underground and fuel oil 148 135 Materials and supplies 327 309 Income taxes receivable 361 186 Other 169 160 Total current assets 5,159 4,878 Property, Plant, and Equipment 41,227 39,701 Gas 13,162 12,571 Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2			
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Regulatory balancing accounts 1,205 936 Other 275 366 Regulatory assets 508 564 Inventories: Inventories: Gas stored underground and fuel oil 148 135 Materials and supplies 327 309 Income taxes receivable 361 186 Other 169 160 Total current assets 5,159 4,878 Property, Plant, and Equipment 41,227 39,701 Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,899 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539	at respective dates)		
Other Regulatory assets 275 366 Regulatory assets 508 564 Inventories: Gas stored underground and fuel oil 148 135 Materials and supplies 327 309 Income taxes receivable 361 186 Other 169 160 Total current assets 5,159 4,878 Property, Plant, and Equipment 41,227 39,701 Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Regulatory assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,5529	Accrued unbilled revenue	74 74 11 11 11 11 11 11 11 11 11 11 11 11 11	30
Content 508 564 Inventories: 363 148 135 Gas stored underground and fuel oil 148 135 Materials and supplies 327 309 Income taxes receivable 361 186 Other 169 160 Total current assets 5,159 4,878 Property, Plant, and Equipment 41,227 39,701 Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Regulatory assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,5322	Regulatory balancing accounts	C EDRO A TOWN OF BUILDING TO THE STREET, BY THE STR	ALL REAL PROPERTY OF THE PARTY OF THE PARTY.
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Gas stored underground and fuel oil 148 135 Materials and supplies 327 309 Income taxes receivable 361 186 Other 169 160 Total current assets 5,159 4,878 Property, Plant, and Equipment ** Electric 41,227 39,701 Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,532	Inventories:	are 18	- 3 3
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Property, Plant, and Equipment Electric 41,227 39,701 Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522	Other	169	160
Electric 41,227 39,701 Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522	Total current assets	5,159	4,878
Electric 41,227 39,701 Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522	Property, Plant, and Equipment		
Gas 13,162 12,571 Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522	STATES COMPANY MANY TO PROPERTY OF THE PROPERT	41,227	39,701
Construction work in progress 2,030 1,894 Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522	, T#11771 34 5 38 38 38 38 38 38 38 38 38	13,162	12,571
Total property, plant, and equipment 56,419 54,166 Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522	E MANUEL TO A STATE OF THE PARTY OF THE PART	2,030	1,894
Accumulated depreciation (17,352) (16,643) Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets 6,786 6,809 Regulatory assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522		56,419	54,166
Net property, plant, and equipment 39,067 37,523 Other Noncurrent Assets		(17,352)	(16,643)
Other Noncurrent Assets 6,786 6,809 Regulatory assets 6,786 2,161 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522	THE THE STATE AND THE STATE OF	39,067	37,523
Regulatory assets 6,786 6,809 Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522			W
Nuclear decommissioning trusts 2,214 2,161 Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522	######################################	6,786	6,809
Income taxes receivable 122 171 Other 417 381 Total other noncurrent assets 9,539 9,522	. • • • • • • • • • • • • • • • • • • •	2,214	2,161
Other 417 381 Total other noncurrent assets 9,539 9,522	and the state of t	122	171
Total other noncurrent assets 9,539 9,522	the state of the s	417	381
	real and a second of the second	9,539	9,522
			\$ 51,923

See accompanying Notes to the Condensed Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY CONDENSED CONSOLIDATED BALANCE SHEETS

		(Unaudited)			
5 Deci		Balance At			
	-	June 30,	December 3	31,	
(in millions, except share amounts)		2013	2012		
LIABILITIES AND SHAREHOLDERS' EQUITY	deservations	1/1 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2		***	
Current Liabilities					
Short-term borrowings	\$	692		372	
Long-term debt, classified as current		938	4	100	
Accounts payable:			am volum are	891	
Trade creditors		1,155	1,2		
Disputed claims and customer refunds		156	and the second of the contract of the	157	
Regulatory balancing accounts		1,002	2000	534	
Other	6	471	1.7	119	
Interest payable	2000	872	F	365	
Income taxes payable		25	<u> </u>	12	
Deferred income taxes	and the second	85			
Other		1,155	1,7		
Total current liabilities		6,551	5,8	394	
Noncurrent Liabilities	0.00	0			
Long-term debt		11,917	12,1	67	
Regulatory liabilities		5,226	5,0	P-D-S-COLO	
Pension and other postretirement benefits		3,583	3,4	97	
Asset retirement obligations		2,932	2,9		
Deferred income taxes		7,191	6,93	39	
Other	17	2,031	1,9:	59	
Total noncurrent liabilities		32,880	32,5	69	
Commitments and Contingencies (Note 10)			- T		
Shareholders' Equity		**************************************			
Preferred stock		258	25	58	
Common stock, \$5 par value, authorized 800,000,000 shares, 264,374,809	1 3		63		
shares outstanding at respective dates		1,322	1,32	22	
Additional paid-in capital	147	5,346	4,68	82	
Reinvested earnings		7,492	7,29	91	
Accumulated other comprehensive loss		(84)	-	93)	
Total shareholders' equity		14,334	13,40	_	
TOTAL LIABILITIES AND SHAREHOLDERS! EQUITY	\$	53,765	\$ 51,92		

See accompanying Notes to the Condensed Consolidated Financial Statements.





CALIFORNIA INDEPENDENT SYSTEM OPERATOR

2008

CAISO Transmission Plan

A Long – Term Assessment of the California ISO's Controlled Grid (2008-2017)

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2008 CAISO Transmission Plan

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3.2 CAISO Management Approved - New Transmission Projects Proposals

Based on the project proposals CAISO received during this year transmission planning cycle, Tables 3-4 to 3-6 below list the transmission projects proposals in Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric service territories areas that CAISO management approvals have been granted. In addition, justifications for approving these projects are provided in <u>Appendix B</u>.

Table 3-4 Projects Proposals in PG&E system that received CAISO Management Approval

#	Project Title	Purpose And Benefit	County	Project Scope	Cost Range (\$)	Targeted In-Service Date
1	Menlo 60 kV Switch Upgrade	Reliability - Meet Customer Demand,	San Mateo	Replace 60 kV switches at Menlo 60 kV Substation	<1M	2008
2	Merced 115 kV Bus Reconductoring	Reliability - Meet Customer Demand	Merced	Reconductor 115 kV Bus	<1M	2008
3	Stone Substation Capacity Increase (D)	Reliability - Interconnect Customer	Yolo	Change Distribution Substation Interconnection	1M - 5M	2008
4	Plainfield Substation Capacity Increase (D)	Reliability - Interconnect Customer	Yolo	Change Distribution Şubstation Interconnection	1M - 5M	2008
5	Live Oak Substation Capacity Increase (D)	Reliability Interconnect Customer	Sutter	Change Distribution Substation Interconnection	5M – 10M	2008
6	Plumas Substation Capacity Increase (D)	Reliability - Interconnect Customer	Sutter	Change Distribution Substation Interconnection	5M – 10M	2008
7	Davis 115 kV Circuit Breaker	Reliability - Improve Service Reliability	Yolo	New Circuit Breaker/ Line Reconfigure	1M - 5M	2008
8	Potrero Bus Parallel Circuit Breaker Project	Reliability - Improve Service Reliability	San Francisco	Add a second parallel breaker	1M - 5M	2009
9	7th Standard Substation Capacity Increase (D)	Reliability - Interconnect Customer	Kern	Interconnect Distribution Substation	1M - 5M	2009
10	Battery Storage Project	Reliability - Meet Customer Demand and Improve Service Reliability	San Mateo	Install a 5 to 7 MW sodium-sulfur (NaS) battery system Salmon Creek Substation	10M - 20M	2009

Table 3-4 Projects Proposals in PG&E system that received CAISO Management Approval (Cont)

#	Project Title	Purpose And Benefit	County	Project Scope	Cost Range (\$)	Targeted In-Service Date
11	Humboldt Reactive Support (Scope Change)	Reliability - Improve Service Reliability	Humboldt	Install SVC at Humboldt Substation	1M - 5M	2009
12	Newark – Ravenswood 230 kV Line (Scope Change)	Reliability - Meet Customer Demand and Improve Service Reliability	San Mateo and Alameda	Reconductor Newark Ravenswood and Tesla Ravenswood 230 kV Line	10M – 20M	2009
13	Reconductoring	Reliability - Meet Customer Demand and Improve Service Reliability	Yolo	Reconductor 115 kV Lines	5M – 10M	2009
14	Brighton 230/115 kV Transformer Replacement	Reliability - Meet Customer Demand	Sacramento	Transformer Replacement	5M – 10M	2009
15	Contra Costa – Las Positas 230 kV Line (Scope Change)	Meet Customer Demand and Improve Service Reliability	Contra Costa	Reconductor the Contra Costa – Las Positas and Contra Costa – Lone Tree 230 kV Lines	10М — 20М	2010
16	Cooley Landing 115/60 kV Transformer Capacity Upgrade	Reliability - Meet Customer Demand and Improve Service Reliability	San Mateo	Replace Cooley Landing 115/60 kV Transformer No. 1 by 2010 and No. 2 by 2011	10M - 20M	2010
17	Table Mountain – Rio Oso 230 kV Line Reconductor and Tower	Reliability - Meet Customer Demand and Improve Service Reliability	Yuba and Sutter	Line Reconductor	1M - 5M ¹¹	2010
18	Tesla 115 kV Capacity Increase	Reliability - Meet Customer Demand and Reduce LCR	San Joaquin	Increase Transmission Capacity	10M 20M	2010
19	West Fresno Reactive Support	Reliability	Fresno	Install Caps At West Fresno	1M – 5M	2010
20	Wheeler Ridge 230/70 kV Transformer	Reliability		Add a Second 230/70 kV bank	5M – 10M	2010
21	East Nicolaus 115 kV Area Reinforcement	Reliability - Meet Customer Demand	Sutter	Increase 115 kV Transmission Capacity	5M – 10M	2011
22	Missouri Flat - Gold Hill 115 kV Line	Reliability - Meet Customer Demand and Improve Service Reliability	Calaveras	Line Reconductor	10M – 20M	2011

¹¹ Cost reflects only capacity increase costs.

2008 CAISO Transmission Plan

Table 3-4 Projects Proposals in PG&E system that received CAISO Management Approval (Cont)

#	Project Title	Purpose And Benefit	County	Project Scope	Cost Range (\$)	Targeted In-Service Date
23	Placer - Horseshoe 115 kV Reinforcement Project12	Reliability - Meet Customer Demand	Placer	Reconductor Placer to Horseshoe of Placer-Gold Hill Nos. 1 & 115 kV Lines	40M -50M	2009
24	Vaca Dixon - Birds Landing 230 kV Reconductoring	Reliability - Meet Customer Demand and Access Resource	Solano	Reconductor 230 kV Lines	20M 30M	2009
25	Central Coast Switching Station (Crazy Horse)	Reliability - Improve Service Reliability	San Benito	Construct New Switching Station	30M 40M	2009

Table 3-5 Projects Proposals in SCE system that received CAISO Management Approval

#	Project Title	Purpose And Benefit	Cost Range (\$)	Target In- Service Date
1	Mira Loma Substation Install new 500kV CBs for AA Banks	Reliability - to meet SCE substation reliability criteria and provide operational flexibility	<10M	6/1/2009
2	Vincent Substation Install new 500kV CBs for AA Banks	Reliability - to meet SCE substation reliability criteria and provide operational flexibility	< 20M	12/1/2008
3	Lugo Substation Install new 500kV CBs for AA Banks	Reliability - to meet SCE substation reliability criteria and provide operational flexibility	< 10M	12/1/2011
4	Helijet Shunt Capacitor Bank	Reliability - Mitigate voltage criteria for N-1	< 1M	6/1/2009
5	Frazier Park Dynamic Voltage Support	Reliability - Mitigate voltage criteria for N-1	< 5M	6/1/2009

¹² This project was formerly called the Placer 115 kV Reinforcement Project

Project No 22 Valley Springs #1 60 kV Line Reconductor

Operating date May 2011

Justifications

Status

The Cal-ISO does not approve this project.

Expansion Plan. This section also includes Cal-ISO comments on some potential transmission projects not yet submitted After a review of the information provided by PG&E, the Cal-ISO has concluded that while PG&E has demonstrated that make a reasonable, technical assessment that certain proposed projects are both prudent and technically sound. As a mitigation is required to meet ISO Grid Planning Standards, there is insufficient information available for the Cal-ISO to result the Cal-ISO approval could not be provided at this time. The Cal-ISO requests PG&E to resubmit these projects with the required analysis as soon as possible, but no later than the completion of the 2007 Electric Transmission Grid for Cal-ISO approval

Project No 23 Missouri Flat-Gold Hill 115 kV Lines

Operating date May 2011 or earlier

The Cal-ISO grants approval for this project.

Justifications

Status

possible for the existing towers and no less then 954 SSAC. Also, since these are existing problems, the project should be 477 SSAC then please prepare additional projects in this area in order to eliminate all category B and C criteria violations expedited as much as possible. If the existing towers can not take the weight of this conductor and the project reverts to It has demonstrated that the preferred alternative is a prudent and technically sound solution to the identified reliability criteria violations. The CAISO is requesting that these lines be reconductored with the highest capacity conductor (see 2008 or 2010-2012 CAISO LCR reports)

CERTIFICATE OF SERVICE BY HAND DELIVERY

I, the undersigned, state that I am a citizen of the United States and am employed in the City and County of San Francisco; that I am over the age of eighteen (18) years and not a party to the within cause; and that my business address is 77 Beale Street, B30A, San Francisco, California 94105

On August 13, 2013, I served a true copy of:

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE MISSOURI FLAT – GOLD HILL 115 kV POWER LINE RECONDUCTORING PROJECT

by hand delivery, addressed to:

Jenny Au Division of Ratepayer Advocates California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102

Jason Coontz
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on this 13th day of August, at San Francisco, California.